COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

July 15, 2016

Mr. Craig Georg
Pentagon Reservation
U.S. Department of Defense
1155 Defense Pentagon, Room 5D325
WHS/FSD/SCD
Washington, D.C. 20301

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Reissuance of VPDES Permit No. VA0032000
The Pentagon Reservation
Arlington County

Dear Mr. Georg:

The Department of Environmental Quality (DEQ) has approved the enclosed effluent limitations and monitoring requirements for the above-referenced permit. Copies of your permit and fact sheet are enclosed.

A Discharge Monitoring Report (DMR) form is no longer included in the reissuance package since you are already enrolled in DEQ's electronic DMR (e-DMR) program. The first electronic DMR submittal for the month of August 2016 is due by September 10, 2016. Please reference the effluent limits in your permit and report monitoring results in e-DMR to the same number of significant digits as are included in the permit limits for the parameter. The regional contact for e-DMR is Rebecca Vice; she can be reached at (703) 583-3922 or by e-mail at rebecca.vice@deq.virginia.gov.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Alternately, any owner under §§ 62.1-44.16, 62.1-44.17, and 62.1-44.19 of the State Water Control Law aggrieved by any action of the State Water Control Board taken without a formal hearing, or by inaction of the Board, may demand in writing a formal hearing of such owner's grievance, provided a petition requesting such hearing is filed with the Board. Said petition must meet the requirements set forth in §1.23(b) of the Board's Procedural Rule No. 1. In cases involving actions of the Board, such petition must be filed within thirty days after notice of such action is mailed to such owner by certified mail.

If you have questions about the permit, please contact Anna Westernik at anna.westernik@deq.virgina.gov or 703-583-3837.

Respectfully,

Bryant Thomas
Regional Water Permits & Planning Manager

Enc.: Permit for VA0032000
Fact Sheet for VA0032000

cc: DEQ-Water, OWPP
EPA-Region III, 3WP12
Department of Health, Culpeper

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. **VA0032000**
Effective Date: **8/1/2016**
Expiration Date: **7/31/2021**

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I – Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner Name:	The Department of Defense
Facility Name:	The Pentagon Reservation
County:	Arlington
Facility Location:	425 Old Jefferson Davis Highway, Arlington, VA 22202

The owner is authorized to discharge to the following receiving stream:

Stream Name:	Roaches Run
River Basin:	Potomac River
River Subbasin:	Potomac River
Section:	6
Class:	II
Special Standards:	b, y

Thomas A. Faha
Director, Northern Regional Office
Department of Environmental Quality

July 14, 2016
Date

A. Effluent Limitations and Monitoring Requirements

1. Outfalls 001/002 – 130 MGD Facility

a There shall be no discharge of floating solids or visible foam in other than trace amounts

b During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to discharge from Outfall Numbers 001 and 002. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Weekly Average[1]	Minimum	Maximum[1]	Frequency	Sample Type
Effluent Flow (MGD) [2]	NL	NA	NA	NL	1/D	TIRE
pH (S.U.)	NA	NA	6.0	8.5	1/D	Grab
Temperature (C) [3]	NA	NA	NA	32°	2/D	IS
Copper, Total Recoverable (µg/L)	32	NA	NA	32	1/M	Grab
Total Hardness (mg/L)	NA	NA	NA	NL	1/M	Grab
Effluent Nitrate+Nitrite, as N (mg/L)	NL	NA	NA	NA	1/3M [4]	24H-C
Effluent TKN (mg/L)	NL	NA	NA	NA	1/3M [4]	24H-C
Effluent Total Nitrogen (mg/L) [5]	NL	NA	NA	NA	1/3M [4]	Calculated
Effluent Total Nitrogen [6] (Lbs. Year to Date)	NA	NA	NA	NL	1/3M [4]	Calculated
Effluent Total Nitrogen [6] (Lbs./Calendar Year)	NA	NA	NA	NL	1/Y	Calculated
Influent Nitrate+Nitrite, as N (mg/L)	NL	NA	NA	NA	1/3M [4]	24H-C
Influent TKN (mg/L)	NL	NA	NA	NA	1/3M [4]	24H-C
Influent Total Nitrogen (mg/L) [5]	NL	NA	NA	NA	1/3M [4]	Calculated
Influent Total Nitrogen [6] (Lbs. Year to Date)	NA	NA	NA	NL	1/3M [4]	Calculated
Influent Total Nitrogen [6] (Lbs./Calendar Year)	NA	NA	NA	NL	1/Y	Calculated
Chronic 3-Brood Static Renewal *C. dubia* (TU_c) [7]	NA	NA	NA	NL	See Permit Part I.C	24H-C
Chronic 7-Day Static Renewal *P. promelas* (TU_c) [7]	NA	NA	NA	NL	See Permit Part I.C	24H-C

[1] See Part I B

[2] The design flow is 130 MGD

[3] The maximum temperature of the discharge from Outfalls 001 and 002 shall not exceed 32°C unless instream monitoring conducted in accordance with the approved Instream Monitoring Plan shows the rise in temperature does not exceed 3°C

[4] Quarterly sampling periods are Jan – Mar, Apr – Jun, Jul – Aug, and Oct – Dec Monitoring results are due each Jan 10, Apr 10, Jul 10, and Oct 10

[5] Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO_2+NO_3 Nitrogen and shall be calculated from the results of those tests

[6] See Part I B 3 for nutrient reporting calculations.

[7] See Part I C for toxicity monitoring requirements

MGD = Million gallons per day
NL = No limit, monitor and report
NA = Not applicable
TIRE = Totalizing, indicating and recording equipment
S U = Standard Units
C = Celsius
IS = Immersion stabilization
TU_c = Toxic Units

1/D = Once every day
2/D = Twice every day
1/M = Once every month
1/3M = Once each quarter
1/Y = Once every year

Grab = An individual sample collected over a period of time not to exceed 15-minutes

24H-C = A composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing Discrete sampling may be proportioned either by varying the time interval between each aliquot or the volume of each aliquot Time composite samples consisting of a minimum of twenty-four (24) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge

B. Additional Monitoring Requirements, Quantification Levels and Compliance Reporting

1. Quantification Levels

   a. The quantification levels (QL) shall be less than or equal to the following concentrations:

Characteristic	Quantification Level
Total Recoverable Copper	6.3 µg/L

   b. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

2. Compliance Reporting for parameters in Part I.A.

   a. Monthly Average – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.B.1.a of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in Part I.B.1.a above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise, use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

   b. Daily Maximum - Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.B.1.a of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise, use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

   c. Single Datum - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in Part I.B.1.a above). Otherwise, the numerical value shall be reported.

d. Significant Digits - The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

3. Total Nitrogen (TN) Reporting Calculations for Part I. A

a. Each calendar quarter, the DMR shall show the calendar year-to-date mass of TN withdrawn and discharged calculated in accordance with the following formulae:

$MD_{ytd} = (\Sigma_{\text{calendar quarters}})$

where:

MD_{ytd}- = mass of TN year to date

b. The TN mass for the calendar year withdrawn and discharged shall be shown on the December DMR due January 10th of the year following the monitoring. This value shall be calculated in accordance with the following formulae:

$MD_{cy} = (\Sigma_{(Jan\text{-}Dec)})$

where:

MD_{cy} = annual mass for the calendar year

c. For TN, if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

C. Whole Effluent Toxicity Program Requirements

1. Biological Monitoring for Outfall 001/Outfall 002

a. In accordance with the schedule in Part I.C.2. below, the permittee shall conduct annual chronic toxicity tests for the duration of the permit. The permittee shall collect 24-hour flow-proportioned composite samples of the final effluent from Outfall 001/Outfall 002.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*

Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable and a

retest shall be performed. The NOEC as determined by hypothesis testing shall be converted to TU_c (Chronic Toxic Units) for DMR reporting where $TU_c = 100/NOEC$. Report the LC_{50} at 48 hours and the IC_{25} with the NOEC's in the test report.

b. The permittee may provide additional samples to address data variability. These data shall be reported. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. The test dilutions shall bracket and include the following endpoints:

Chronic NOEC $\geq$ 35%; equivalent to a $TU_c \leq 2.85$

d. The test data will be evaluated statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee or if toxicity has been noted. Should evaluation of the data indicate that a limit is warranted, a WET limit and compliance schedule will be required.

e. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limitation shall control the toxicity of the effluent.

2. Reporting Schedule

The permittee shall monitor during the specified period; shall report the results on the DMR; and shall supply one copy of the toxicity test report specified in this Whole Effluent Toxicity program in accordance with the following schedule:

Period	Sampling Period	DMR/Report Submission Dates
Annual 1	October 1, 2016 – December 31, 2016	January 10, 2017
Annual 2	April 1, 2017 – June 30, 2017	January 10, 2018
Annual 3	January 1, 2018 – March 31, 2018	January 10, 2019
Annual 4	July 1, 2019 – September 30, 2019	January 10, 2020

D. Other Requirements and Special Conditions

1. Operation and Maintenance (O&M) Manual Requirement:
The permittee shall maintain a current O&M Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations at 9VAC25-31.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ-NRO for review and approval.

The O&M Manual shall detail the practices and procedures that will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent samples;

b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;

c. Discussion of Best Management Practices, if applicable;

d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants that will prevent these materials from reaching state waters; and a list of the type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;

e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;

f. List of facility, local and state emergency contacts;

h. Procedures for reporting and responding to any spills; and

j. All requirements of Part I.D.12 of this permit.

2. Notification Levels:
The permittee shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

1) One hundred micrograms per liter;

2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

3) Five times the maximum concentration value reported for that pollutant in the permit application; or

4) The level established by the Board.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant, which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

1) Five hundred micrograms per liter;

2) One milligram per liter for antimony;

3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

4) The level established by the Board.

3. Materials Handling/Storage:
Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

4. Discharges from Outfall 001:
The permittee shall only discharge from Outfall 001 during periods of maintenance or emergencies. The permittee shall notify DEQ-NRO and Arlington County at least 7 days in advance of scheduled maintenance and within 24 hours of emergency events. Discharges from Outfall 001 shall be monitored in accordance with Part I.A of this permit.

5. Non-Contact Cooling Water Additives:
The permittee shall notify DEQ-NRO in writing at least 30 days before changing chemical additives in the non-contact cooling water. Should the use of chemical additives significantly alter the characteristics of the non-contact cooling water discharge, this permit may be modified or alternatively, revoked and reissued to include appropriate limitations or conditions.

6. Water Quality Criteria Monitoring:
The permittee shall monitor the effluent for the substances noted in Attachment A, "Water Quality Criteria Monitoring" according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be initiated after the start of the third year from the permit's effective date. Using Attachment A as the reporting form, the data shall be submitted with the next application for reissuance, which is due at least 180 days prior to the expiration date of this permit. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.

7. Water Quality Criteria Reopener:
Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

8. Temperature/Instream Monitoring:
The maximum temperature at the point of compliance prior to discharge from either Outfall 001 or Outfall 002 shall not exceed 32°C unless instream monitoring shows the rise in natural temperature between the intake and the discharge location does not exceed 3°C per 9VAC 25-260 and Part I.A of this permit. Instream monitoring shall be conducted in accordance with the approved Instream Monitoring Plan from April 1 to September 30 to assess the effect of temperature change on the receiving stream. Instream Monitoring may be conducted the remainder of the year to determine compliance with the 32°C temperature requirement if necessary.

9. Nutrient Monitoring:
Concurrent quarterly composite monitoring of TN at the intake and outfall for a period of one year shall be conducted. If it is determined that the net discharge of TN to the receiving stream does not adversely affect the watershed TN loading, monitoring of TN can cease for the remainder of the permit cycle.

10. PCB Monitoring:
The permittee shall monitor the effluent at Outfall 002 for Polychlorinated Biphenyls (PCBs). The permittee shall conduct the sampling and analysis in accordance with the requirements specified below. At a minimum:

Monitoring and analysis shall be conducted in accordance with the most current version of EPA Method 1668 or other equivalent methods capable of providing low-detection level, congener specific results. Any equivalent method shall be submitted to DEQ-NRO for review and approval prior to sampling and analysis. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.

The permittee shall collect two samples during the term of the permit. One sample shall be collected from December 1 – February 28 and one sample shall be collected from June 1 to August 31. Samples previously collected, analyzed, and approved by DEQ during the aforementioned periods utilizing a low-detection level congener specific method may be used in satisfying the sampling requirement even if the collection occurred prior to the current permit term.

Each effluent sample shall consist of a minimum two (2) liter volume and be collected using either 24 hour manual or automated compositing methods. The sampling protocol shall be submitted to DEQ-NRO for review and approval prior to the sample collection.

The data shall be submitted to DEQ-NRO by the 10th day of the month following receipt of the results. The permittee shall have the option of submitting the results electronically. The submittal shall include the unadjusted and appropriately qualified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results shall be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.

If the results of this monitoring indicate actual or potential exceedences of the water quality criterion, the permittee shall submit for review and approval a Pollutant Minimization Plan (PMP) designed to locate and reduce sources of PCBs in the collection system upon notification by DEQ-NRO. A component of the plan may include an evaluation of the PCB congener distribution in the initial source intake water to determine the net contributions of PCBs introduced to the treatment works.

11. Interim §316(b) Best Technology Available (BTA)
The permittee shall implement interim Best Technology Available (BTA) measures to minimize impingement and entrainment (I&E) mortality and adverse impacts. The following interim BTA measures are to be employed throughout the term of this permit:

a. Use of a reduced number of pumps supplying cooling water to the chillers. No more than eight (8) of the total ten (10) pumps shall be operated at any one time during the peak use periods extending from June through August of each year. During the remainder of the year, the number of pumps in use, flow, and intake velocity shall be decreased such that no more than four (4) pumps shall be operated at any one time during the non-peak flow periods.

b. Shut off of the screen drive motor when both the ten minute minimum runtime expires and the differential level across the screens falls below two (2) inches to reduce the volume of intake water pulled through the screen.

c. Manually empty the troughs at the intake screen after each run of the intake structures to reduce fish entrapment and entrainment. A trough allowing automated removal of impinged fish may substitute for manual removal of fish.

The permittee shall maintain records to document all interim BTA measures described above. Documentation shall include pump operating logs, screen run times and a log of manual fish trough inspections and/or cleanings.

12. Impingement and Entrainment Control Technology Preventative Maintenance
The Operations and Maintenance (O&M) Manual for the permitted facility shall include a description of procedures and a regular schedule for preventative maintenance of all impingement and entrainment (I&E) control technologies and measures, and shall include a description of mitigation protocols and practices to implement should a water withdrawal event occur while an I&E technology or measure is off-line. The O&M Manual shall be updated to incorporate the information required by this condition by no later than 90 days following the effective date of this permit. All I&E control technologies and measures shall be maintained in effective operating condition. The permittee shall maintain documentation of maintenance and repairs of I&E control technologies and measures, including, but not limited to: the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, and date(s) the control technologies returned to full function.

13. Alternate Schedule for Submittal of 40 CFR §122.21(r) Information:
The permittee shall, by no later than 270 days prior to the expiration date of this permit, submit to the DEQ Regional Office all applicable information described in 40CFR §122.21(r).

14. Visual or Remote Inspections
The permittee shall conduct visual inspections or employ remote monitoring devices during the period any cooling water intake structure is in operation. Inspections shall be conducted no less frequently than weekly to ensure that any technologies operated to comply with impingement mortality and entrainment requirements, any additional measures necessary to protect listed threatened and endangered species and designated critical habitat, and other standards for minimizing adverse environmental impact as established in this permit, are maintained and operated to function as designed.

Inspection documentation shall include at a minimum:

a. Date, time, and location of the inspection or remote monitoring period;

b. The name(s) and signature(s) of the inspector(s);

c. A description of water withdrawal volumes or rates occurring at the time of the inspection;

d. Where available, head loss across the intake screen(s);

e. If adverse weather conditions exist, a description of the adverse weather conditions; and

f. Any technologies needing maintenance, repair, or replacement;

The requirement to conduct visual or remote inspections is waived when no water is withdrawn through all cooling water intake structures during an entire inspection period. For each cooling water intake structure, the permittee shall document the date(s) when no water is withdrawn through the respective intake structure.

When adverse weather conditions prevent visual inspections or remote monitoring from being safely conducted during a given inspection period, the visual inspection or remote monitoring requirements may be waived provided the permittee prepares documentation explaining the reasons why a visual inspection or remote monitoring could not be safely conducted. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such events as local flooding, high winds, electrical storms, or situations that otherwise make an inspection impracticable, such as drought or extended frozen conditions.

Any deficiencies found during a visual inspection or remote monitoring event shall be corrected as soon as possible, but no later than 30 days following discovery, unless permission for a later date is granted by DEQ in writing.

All documentation relating to visual inspections or remote monitoring, or the inability to safely conduct such monitoring due to adverse weather conditions, shall be signed and certified in accordance with Part II.K of this permit and shall be made available to DEQ personnel for review during facility inspections or no later than 30 days following receipt of a request by DEQ.

15. Annual Certification Statement Requirements

The permittee shall annually prepare a written statement certifying either: a) operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure have been substantially modified, or b) no substantial changes have occurred in the operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure.

If substantially modified operations have occurred, the permittee must provide with the annual certification statement a summary of those changes. In addition, the permittee must submit revisions to the information required at 40 CFR §122.21(r) with the next application for reissuance of this permit.

Certification statements shall be signed in accordance with Part II.K of this permit and submitted to the DEQ Northern Regional Office by no later than each February 10 for the period covering the preceding calendar year.

16. Measures to Protect Federally-Listed Threatened or Endangered (T&E) Species, Designated Critical Habitat, and Fragile Species or Shellfish

The permittee shall operate each cooling water intake structure and cooling system in a manner designed to minimize incidental take, reduce or remove more than minor detrimental effects to Federally-listed threatened, endangered, or fragile species and designated critical habitat, including prey base.

The permittee shall prepare, on a calendar year basis, a report providing an assessment of the efficiency/effectiveness of the facility's control measures. The report shall include a compilation of all federally-listed threatened or endangered species found to have been impinged or entrained during the reporting year, including the total number and type of organisms (listed by taxa), and life stage cycle (egg, larva, juvenile, adult) impacted by injury or death. The assessments and compiled data shall be submitted to the DEQ-Regional Office by no later than each February 10 for the preceding calendar year.

17. Federal Endangered Species Act Compliance
Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

18. Total Maximum Daily Load (TMDL) Reopener:
This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

Part II. Conditions Applicable To All VPDES Permits

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
   a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
   b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
   c. Samples taken shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.

3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling or measurements;
   c. The date(s) and time(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used; and
   f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

   Department of Environmental Quality - Northern Regional Office (DEQ-NRO)
   13901 Crown Court
   Woodbridge, VA 22193

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from this discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F.; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F., shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
   a. Any unanticipated bypass; and
   b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within 5 days and shall contain:
   a. A description of the noncompliance and its cause;
   b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
   c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II, I.1.or I.2., in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II, G., H. and I. may be made to the Department's Northern Regional Office at (703) 583-3800 (voice) or online at **http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx** . For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

      1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
      2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

      2) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:

1) The chief executive officer of the agency, or
2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part II.K.1.;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II.K.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2. shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Parts II, K.1. or K.2. shall make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these

standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U.), and "upset" (Part II.V.) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II. U.2. and U.3.

2. Notice
   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass.
   a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
      1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      3) The permittee submitted notices as required under Part II.U.2.

   b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2. are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated;
   c. The permittee submitted notice of the upset as required in Part II.I.; and
   d. The permittee complied with any remedial measures required under Part II.S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. **Inspection and Entry**

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2., a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II.Y.1., this permit may be automatically transferred to a new permittee if:
   a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
   b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
   c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

ATTACHMENT A
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website: http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, dissolved	(3)	640		G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(3)	90		G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(3)	0.79		G or C	1/5 YR
16065-83-1	Chromium III, dissolved [6]	(3)	52		G or C	1/5 YR
18540-29-9	Chromium VI, dissolved [6]	(3)	6.4		G or C	1/5 YR
7440-50-8	Copper, dissolved	(3)	6.3		G or C	1/5 YR
7439-92-1	Lead, dissolved	(3)	10		G or C	1/5 YR
7439-97-6	Mercury, dissolved	(3)	0.46		G or C	1/5 YR
7440-02-0	Nickel, dissolved	(3)	14		G or C	1/5 YR
7782-49-2	Selenium, Total Recoverable	(3)	3.0		G or C	1/5 YR
7440-22-4	Silver, dissolved	(3)	1.9		G or C	1/5 YR
7440-28-0	Thallium, dissolved	(3)	(4)		G or C	1/5 YR
7440-66-6	Zinc, dissolved	(3)	55		G or C	1/5 YR
PESTICIDES/PCBs						
309-00-2	Aldrin	608/625	0.05		G or C	1/5 YR
57-74-9	Chlordane	608/625	0.2		G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	622	(4)		G or C	1/5 YR
72-54-8	DDD	608/625	0.1		G or C	1/5 YR
72-55-9	DDE	608/625	0.1		G or C	1/5 YR
50-29-3	DDT	608/625	0.1		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
8065-48-3	Demeton (synonym = Dementon-O,S)	622	(4)		G or C	1/5 YR
333-41-5	Diazinon	622	(4)		G or C	1/5 YR
60-57-1	Dieldrin	608/625	0.1		G or C	1/5 YR
959-98-8	Alpha-Endosulfan (synonym = Endosulfan I)	608/625	0.1		G or C	1/5 YR
33213-65-9	Beta-Endosulfan (synonym = Endosulfan II)	608625	0.1		G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608/625	0.1		G or C	1/5 YR
72-20-8	Endrin	608/625	0.1		G or C	1/5 YR
7421-93-4	Endrin Aldehyde	608/625	(4)		G or C	1/5 YR
86-50-0	Guthion (synonym = Azinphos Methyl)	622	(4)		G or C	1/5 YR
76-44-8	Heptachlor	608/625	0.05		G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	608/625	(4)		G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608/625	(4)		G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608/625	(4)		G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC (syn. = Lindane)	608/625	(4)		G or C	1/5 YR
143-50-0	Kepone	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
121-75-5	Malathion	614	(4)		G or C	1/5 YR
72-43-5	Methoxychlor	608.2	(4)		G or C	1/5 YR
2385-85-5	Mirex	8081 Extended/ 8270C/8270D	(4)		G or C	1/5 YR
56-38-2	Parathion (synonym = Parathion Ethyl)	614	(4)		G or C	1/5 YR
1336-36-3	PCB, total	608/625	7.0		G or C	1/5 YR
8001-35-2	Toxaphene	608/625	5.0		G or C	1/5 YR
BASE NEUTRAL EXTRACTABLES						
83-32-9	Acenaphthene	610/625	10.0		G or C	1/5 YR
120-12-7	Anthracene	610/625	10.0		G or C	1/5 YR
92-87-5	Benzidine	625	(4)		G or C	1/5 YR
56-55-3	Benzo (a) anthracene	610/625	10 0		G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	610/625	10.0		G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	610/625	10.0		G or C	1/5 YR
50-32-8	Benzo (a) pyrene	610/625	10.0		G or C	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	625	(4)		G or C	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
108-60-1	Bis 2-Chloroisopropyl Ether	625	(4)		G or C	1/5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0		G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		G or C	1/5 YR
91-58-7	2-Chloronaphthalene	625	(4)		G or C	1/5 YR
218-01-9	Chrysene	610/625	10 0		G or C	1/5 YR
53-70-3	Dibenzo (a,h) anthracene	610/625	20.0		G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	602/624	10.0		G or C	1/5 YR
91-94-1	3,3-Dichlorobenzidine	625	(4)		G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0		G or C	1/5 YR
131-11-3	Dimethyl phthalate	625	(4)		G or C	1/5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0		G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	625/ 8270C/8270D	(4)		G or C	1/5 YR
206-44-0	Fluoranthene	610/625	10.0		G or C	1/5 YR
86-73-7	Fluorene	610/625	10 0		G or C	1/5 YR
118-74-1	Hexachlorobenzene	625	(4)		G or C	1/5 YR
87-68-3	Hexachlorobutadiene	625	(4)		G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	625	(4)		G or C	1/5 YR
67-72-1	Hexachloroethane	625	(4)		G or C	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	610/625	20.0		G or C	1/5 YR
78-59-1	Isophorone	625	10 0		G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0		G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	625	(4)		G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	(4)		G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	625	(4)		G or C	1/5 YR
129-00-0	Pyrene	610/625	10.0		G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		G or C	1/5 YR

VOLATILES						
107-02-8	Acrolein	624	(4)		G	1/5 YR
107-13-1	Acrylonitrile	624	(4)		G	1/5 YR
71-43-2	Benzene	602/624	10.0		G	1/5 YR
75-25-2	Bromoform	624	10.0		G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	1/5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	602/624	50 0		G	1/5 YR
124-48-1	Chlorodibromomethane	624	10 0		G	1/5 YR
67-66-3	Chloroform	624	10.0		G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	624	(4)		G	1/5 YR
78-87-5	1,2-Dichloropropane	624	(4)		G	1/5 YR
542-75-6	1,3-Dichloropropene	624	(4)		G	1/5 YR
100-41-4	Ethylbenzene	602/624	10.0		G	1/5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	(4)		G	1/5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0		G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	(4)		G	1/5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10 0		G	1/5 YR
10-88-3	Toluene	602/624	10.0		G	1/5 YR
79-00-5	1,1,2-Trichloroethane	624	(4)		G	1/5 YR
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0		G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0		G	1/5 YR
ACID EXTRACTABLES						
95-57-8	2-Chlorophenol	625	10.0		G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	625	(4)		G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	625	(4)		G or C	1/5 YR
25154-52-3	Nonylphenol	ASTM D 7065-06	(4)		G or C	1/5 YR

87-86-5	Pentachlorophenol	625	50 0		G or C	1/5 YR
108-95-2	Phenol	625	10 0		G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		G or C	1/5 YR
MISCELLANEOUS						
57-12-5	Cyanide, Free [8]	ASTM 4282-02	10.0		G	1/5 YR
1746-01-6	Dioxin (synonym = 2,3,7,8-tetrachlorodibenzo-p-dioxin) (ppq)	1613B	0 00001		G or C	1/5 YR
18496-25-8	Sulfide, dissolved [7]	SM 4500 S^2 B	100		G or C	1/5 YR
60-10-5	Tributyltin	(5)	(4)		G or C	1/5 YR

Name of Principal Executive Officer or Authorized Agent & Title

Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U S.C Sec 1001 and 33 U.S.C Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

(3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.

(4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

(5) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).

(6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(7) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(8) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].